

CLAIMS

1-30. (CANCELED)

31. (NEW) A collapsible crib for a small child comprising:

- a. a frame collapsible simultaneously in two directions comprising:
 - i. four sides comprised of two crossed support arms pivotally attached to upper and lower corner brackets,
 - ii. said corner brackets also attached to adjacent crossed support arms,
 - iii. each of said crossed support arms pivotally connected where they bisect each other and being about the same length as all other crossed support arms,
 - iv. said sides being mounted perpendicularly to each other so as to form a box structure that defines an interior cavity surrounded by the four sides,
- b. said crib further comprising a Structure Locking Element mounted within the interior cavity created by the frame, said Structure Locking Element circumscribing the interior in a continuous manner and offset from the upper corner brackets or lower corner bracket with means for connecting the Structure Locking Element to said upper corner brackets or said lower corner brackets,
- c. said crib further comprising a liner,
 - i. said liner comprised of a continuous side wall panel made of a flexible material and a bottom panel made of a flexible material,
 - ii. the perimeter of said liner side wall panel being approximately the same length as the Structure Locking Element perimeter,
 - iii. said bottom panel attached contiguously to the lower edge of the side wall panel extending around the collapsible crib's interior,
 - iv. the upper edge of said liner side wall panel contiguously attached to said Structure Locking Element if the Structure Locking Element is attached to said upper corner brackets otherwise the

upper edge of said liner side wall is offset from the upper corner brackets,

- d. said crib further including at least two Anti-Collapse Mechanisms to prevent the collapsing of the crib comprising:
 - i. said Anti-Collapse Mechanisms attached to at least two opposing frame corners,
 - ii. said Anti-Collapse Mechanism comprised of a non-expanding material attached vertically between a lower corner bracket and its corresponding upper corner bracket.

- 32. (NEW) A crib as recited in Claims 31 wherein the liner, the Structure Locking Element and the Anti-Collapse Mechanisms are incorporated into a single assembly.
- 33. (NEW) A crib as recited in Claim 31, wherein at least one corner bracket contains an anti-tipping mechanism.
- 34. (NEW) A crib as recited in Claim 31, wherein at least two adjacent corners contain telescoping anti-torque posts.
- 35. (NEW) A crib as recited in Claim 34, wherein caster wheels are mounted on the underside of corner brackets containing telescoping anti-torque posts.
- 36. (NEW) A crib as recited in Claim 31, wherein at least two pairs of opposite side crossed support arms are adjustable in length to allow the four ends of each pair of length adjustable cross support arms to extend or retract to a similar length.
- 37. (NEW) A portable crib collapsible simultaneously in at least two directions for a small child comprising:
 - a. a collapsible crib frame having at least three sides comprising:
 - i. one pair of crossed support arms per side pivotally connected and being substantially equal length to all other crossed support arm pairs when the crib is in its collapsed position,
 - ii. one end of each crossed arm support is pivotally attached to an upper corner bracket and its opposite end is pivotally attached to a lower corner bracket,

- iii. the number of upper corner brackets is equal to the number of sides and the number of lower corner brackets is equal to the number of sides and,
 - iv. said corner brackets are oriented such that each corner bracket is attached to crossed support arms from adjacent sides, thus forming an open topped enclosure,
 - b. means to adjust the length of at least one pair of crossed support arms so as to change the overall dimensions of the crib in a manner that will permit the height or perimeter length to remain constant after adjustment,
 - c. a Structure Locking Element connecting all upper corner brackets comprising: a non-expanding, flexible material used to connect each upper corner bracket to its adjacent corner brackets thus connecting and locking in place the upper or lower perimeter of the collapsible frame,
 - d. an Anti-Collapse Mechanism and means to easily attach and detach said Anti-Collapse Mechanism from the crib's upper corner brackets or lower corner brackets during assembly and disassembly of the crib comprising; a non-expanding, flexible material used to connect at least every other lower corner bracket to its vertically aligned upper corner bracket, and,
 - e. a liner comprising,
 - i. a continuous flexible side wall extending around the collapsible crib's interior perimeter with attachment means to the Structure Locking Element if present,
 - ii. a bottom panel attached contiguously to the lower side wall extending around the collapsible crib's interior.
38. (NEW) A portable crib as recited in Claim 37, wherein at least one corner bracket contains an anti-tipping mechanism.
39. (NEW) The collapsible crib as recited in Claims 37, further including at least two telescoping anti-torque posts each extending between a lower corner bracket and its vertically aligned upper corner bracket.

40. (NEW) The collapsible crib as recited in Claims 37, further including caster wheels mounted on the bottom side of lower corner brackets with telescoping anti-torque posts attached.
41. (NEW) A variable sized collapsible crib for a small child comprising:
- a. a frame collapsible simultaneously in at least two direction which comprises:
 - i. at least two sides each comprised of two crossed support arms pivotally attached to upper and lower corner brackets,
 - ii. each of said crossed support arms pairs pivotally connected,
 - iii. each pair of cross support arms about the same length as all other pairs of crossed support arms when the crib is in its collapsed state,
 - iv. said corner brackets also attached to adjacent side crossed support arms when present,
 - v. at least one crib side,
 1. that does not contain two crossed support arms,
 2. comprised of at least one detachable horizontal cross support arm,
 3. said horizontal crossed support arm(s) connected between two upper corner brackets or two lower corner brackets,
 - a. said upper corner brackets connected to the corresponding upper ends of the crossed support arms on the adjacent sides,
 - b. said lower corner brackets connected to the corresponding lower ends of crossed support arms on the adjacent sides,
 - vi. all sides connected so as to form the perimeter around an interior formed cavity,
 - b. said crib further comprising a Structure Locking Element mounted within the interior cavity created by the frame,
 - i. said Structure Locking Element being a continuous flexible material that is attached to each upper corner bracket,

- c. a crib liner comprising,
 - i. a continuous flexible side wall, extending around the collapsible crib's interior perimeter with attachment means for securing said side wall to the Structure Locking Element,
 - ii. a flexible bottom panel attached to the lower edge of the interior sidewalls,
 - d. Anti-Collapse Mechanisms means to prevent the crib from collapsing comprising:
 - i. Anti-Collapse Mechanisms attached to at least every other upper corner bracket and its vertically associated lower corner bracket,
 - ii. said Anti-Collapse Mechanism comprised of a non-expanding material attached vertically between a lower corner bracket and its corresponding upper corner bracket and means to attach and detach each said Anti-Collapse Mechanism from its an upper corner bracket or a lower corner bracket.
42. (NEW) A collapsible crib as recited in Claim 41, wherein at least one corner bracket contains an anti-tipping mechanism.
43. (NEW) A collapsible crib as recited in Claims 41, wherein the liner, the Structure Locking Element and the Anti-Collapse Mechanisms are incorporated into a single assembly.
44. (NEW) The collapsible crib as recited in Claims 41, further including at least two telescoping anti-torque posts each extending between a lower corner bracket and its vertically aligned upper corner bracket.
45. (NEW) The collapsible crib as recited in Claims 41, further including caster wheels mounted on the bottom side of lower corner brackets with telescoping anti-torque posts attached.
46. (NEW) The collapsible crib as recited in Claim 41 further including means for opening and closing the liner side wall in the vertical plane on the side wall comprised of at least one horizontal cross support arm or for opening and closing the liner side wall in the vertical plane on the side wall comprised of at least one

horizontal cross support and for the upper horizontal cross support to separate at an end or intermediate point to allow access to the crib through the side wall.

47. (NEW) A variable sized collapsible crib for a small child or animal comprising:

- a. a frame collapsible simultaneously in at least two directions which comprises:
 - i. at least two sides each comprised of two crossed support arms pivotally attached to upper and lower corner brackets,
 - ii. each of said crossed support arms pairs pivotally connected,
 - iii. each pair of cross support arms about the same length as all other pairs of crossed support arms when the crib is in its collapsed state,
 - iv. said corner brackets also attached to adjacent side crossed support arms when present,
 - v. at least one crib side,
 - 1. that does not contain two crossed support arms,
 - 2. comprised of at least one horizontal cross support arm detachable on at least one end,
 - 3. said horizontal crossed support arm(s) connected between two upper corner brackets or two lower corner brackets,
 - a. said upper corner brackets connected to the corresponding upper ends of the crossed support arms on the adjacent sides,
 - b. said lower corner brackets connected to the corresponding lower ends of crossed support arms on the adjacent sides,
 - vi. all sides connected so as to form the perimeter around an interior formed cavity,
- b. said crib further comprising a Structure Locking Element made of a flexible material mounted within the interior cavity created by the frame, said Structure Locking Element being a continuous flexible material that is attached to each upper corner bracket or each lower corner bracket

- c. a crib liner comprising a continuous flexible side wall, extending around the collapsible crib's interior perimeter with attachment means for securing said side wall to the Structure Locking Element if present or to the upper corner brackets,
 - d. means to prevent the crib from collapsing comprising: Anti-Collapse Mechanisms attached to at least every other lower corner bracket and their associated upper corner brackets.
48. (NEW) The crib for a small child or animal as recited in claim 47, furthermore including a bottom, or a top, or a bottom and a top contiguously attached to the liner side wall.
49. (NEW) A portable crib as recited in Claim 47, wherein at least one corner bracket contains an anti-tipping mechanism.
50. (NEW) The collapsible crib as recited in Claim 47, further including means for opening and closing the liner side wall in the vertical plane on the side wall comprised of at least one horizontal cross support or for opening and closing the liner side wall in the vertical plane on the side wall comprised of at least one horizontal cross support and for the upper horizontal cross support to separate at an end or intermediate point to allow access to the crib through the side wall.
51. (NEW) A variable sized collapsible crib for a small child comprising:
- a. a four sided frame collapsible simultaneously in at least two direction which comprises:
 - i. three adjacent sides each comprised of two crossed support arms pivotally attached to upper and lower corner brackets,
 - ii. each of said crossed support arm pairs pivotally connected,
 - iii. each pair of cross support arms about the same length as all other pairs of crossed support arms when the crib is in its collapsed state,
 - iv. said corner brackets also attached to adjacent side crossed support arms when present,
 - v. means to adjust the length of two pair of opposite side crossed support arms so as to change the overall dimensions of the crib in a

manner that will permit the height or perimeter length to remain constant after adjustment,

- vi. at least one crib side,
 - 1. that does not contain two crossed support arms,
 - 2. comprised of at least one detachable horizontal cross support arm,
 - 3. said horizontal crossed support arm(s) connected between two upper corner brackets or two lower corner brackets,
 - a. said upper corner brackets connected to the corresponding upper ends of the crossed support arms on the adjacent sides,
 - b. said lower corner brackets connected to the corresponding lower ends of crossed support arms on the adjacent sides,
- vii. all sides connected so as to form the perimeter around an interior formed cavity,
- b. said crib further comprising a Structure Locking Element made of a flexible material mounted within the interior cavity created by the frame, said Structure Locking Element being a continuous flexible material that is attached to each upper corner bracket or each lower corner bracket
- c. a crib liner comprising,
 - i. a continuous flexible side wall, extending around the collapsible crib's interior perimeter with attachment means for securing said side wall to the Structure Locking Element when said Structure Locking Element is attached to upper corner brackets or directly to the upper corner brackets,
 - ii. a flexible bottom panel attached contiguously to the lower edge of the side wall,
- d. Anti-Collapse Mechanisms means to prevent the crib from collapsing comprising;

- i. Anti-Collapse Mechanisms attached to at least two opposing frame corners,
 - ii. said Anti-Collapse Mechanism comprised of a non-expanding material attached vertically between a lower corner bracket and its corresponding upper corner bracket and means to attach and detach each said Anti-Collapse Mechanisms from an upper corner bracket or a lower corner bracket.
- 52. (NEW) The collapsible crib as recited in Claim 51, further including means for opening and closing the liner side wall in the vertical plane on the side wall comprised of at least one horizontal cross support or for opening and closing the liner side wall in the vertical plane on the side wall comprised of at least one horizontal cross support and for the upper horizontal cross support to separate at an end or intermediate point to allow access to the crib through the side wall.
- 53. (NEW) A variable sized collapsible crib for a small child comprising:
 - a. a four sided frame collapsible simultaneously in at least two direction which comprises:
 - i. three adjacent sides each comprised of two crossed support arms pivotally attached to upper and lower corner brackets,
 - ii. each of said crossed support arm pairs pivotally connected,
 - iii. each pair of cross support arms about the same length as all other pairs of crossed support arms when the crib is in its collapsed state,
 - iv. said corner brackets also attached to adjacent side crossed support arms when present,
 - v. the fourth crib side that does not contain two crossed support arms comprising,
 - 1. at least one detachable horizontal cross support arm,
 - 2. said horizontal cross support arm(s) connected between two upper corner brackets or two lower corner brackets,
 - a. said upper corner brackets connected to the corresponding upper ends of the crossed support arms on the adjacent sides,

- e. means for securing the collapsible crib frame sitting on top of a mattress to said mattress or to the bed frame upon which the mattress is resting to prevent the crib from tipping.
54. (NEW) The crib as recited in Claim 53, wherein the horizontal cross support(s) and at least the crossed support arms on the crib side opposite the side containing said horizontal cross support arm(s) are adjustable in length so as to change the overall dimensions of the crib in a manner that will permit the height or perimeter length to remain constant after adjustment.
55. (NEW) The crib as recited in Claim 53, wherein the horizontal cross support attached to upper corner brackets is separable from an upper corner bracket or at an intermediate point along the horizontal cross support near the side wall closure to allow unimpeded side entry into the crib.
56. (NEW) A method for preventing cribs from tipping when placed on a variety of different surfaces comprising:
- a. constructing a crib with at least one lower corner bracket capable of receiving at least two interchangeable surface dependant tipping restraints,
 - b. attaching the tipping restraint appropriate for the surface to the lower corner brackets capable of receiving interchangeable surface dependant tipping restraints.
57. (NEW) A method for converting a juvenile or adult bed into a crib comprising:
- a. placing a four sided collapsible crib frame on top of the mattress on a juvenile or adult bed,
 - i. said crib frame having a smaller footprint than the mattress,
 - ii. said crib frame comprised of four lower corner brackets and four upper corner brackets,
 - iii. one side of said crib frame having a horizontal cross support which pivotally opens at one of its ends or at an intermediate point to create a crib frame structure free area for access into the crib,
 - b. attaching a crib liner to the interior cavity of the crib frame,
 - i. said liner comprised of a continuous side walls and a bottom panel contiguously attached at the lower edges of the side walls,

- ii. the bottom panel comprised of a flexible fabric that is non-porous, washable, and resistant to urine,
 - iii. the side walls comprised of a porous flexible material,
 - iv. and further, a means for separating the side wall at a location near the frame opening created by the pivotal horizontal cross support arm,
 - c. a means for securing all of the crib frame upper corner brackets or all of the lower crib frame corner brackets of said crib frame to the mattress or bed frame upon which the crib is mounted to prevent the crib from tipping or sliding off its supporting mattress.
58. (NEW) A method for utilizing the mattress of an existing juvenile or adult bed as a crib mattress comprising:
- a. placing a collapsible crib frame on the mattress of an existing juvenile or adult bed,
 - i. said crib frame comprising,
 - 1. a four sided frame collapsible simultaneously in at least two direction which comprises:
 - a. three adjacent sides each comprised of two crossed support arms pivotally attached to upper and lower corner brackets,
 - b. each of said crossed support arms pairs pivotally connected,
 - c. each pair of cross support arms about the same length as all other pairs of crossed support arms when the crib is in its collapsed state,
 - d. said corner brackets also attached to adjacent side crossed support arms when present,
 - e. the fourth crib side comprised of an upper detachable horizontal cross support arm , or a lower detachable horizontal cross support arm or both

- upper and lower detachable horizontal cross support arms,
- f. the top horizontal cross support arm, pivotally connected between the two upper corner brackets and the lower horizontal cross support arm pivotally connected between the two lower corner brackets when the cribs is in its erect state,
 - g. means to detach an end or intermediate point of the top horizontal cross support arm when the cribs is in its erect state, to create a crib frame structure free opening for access into the crib's interior,
 - h. each upper corner bracket connected to a horizontal cross support arm is also connected to the corresponding upper ends of the crossed support arms on the adjacent sides when the crib is in its erect state,
 - i. each lower corner bracket that is connected to a horizontal cross support arm is also connected to the corresponding lower ends of crossed support arms on the adjacent sides when the crib is in its erect state,
 - j. all sides connected so as to form the perimeter around an interior formed cavity when the crib is in its erect state,
2. said structure further comprising a Structure Locking Element made of a strong flexible material mounted within the an interior cavity created by the frame, said Structure Locking Element being a continuous flexible structure within the collapsible frame that is attached to each upper corner bracket or each lower corner bracket
3. a crib wall liner and bottom panel comprising,

- a. a continuous flexible side wall, extending around the collapsible crib's interior perimeter with attachment means for securing said side wall to the Structure Locking Element when said Structure Locking Element is attached to the upper corner brackets or directly to the upper corner brackets in the absence of a Structure Locking Element,
 - b. a flexible bottom panel attached contiguously to the lower edge of the interior side wall,
- 4. Anti-Collapse Mechanisms means to prevent the crib from collapsing comprising;
 - a. Anti-Collapse Mechanisms attached to at least two opposing frame corners,
- 5. said Anti-Collapse Mechanism comprised of a non-expanding material attached vertically between a lower corner bracket and its corresponding upper corner bracket and means to attach and detach said Anti-Collapse Mechanisms from their respective upper corner brackets and lower corner brackets.
- 6. means for tie down attached to each lower corner bracket,
 - b. attaching said means for tie down mechanism of the lower corner bracket to or around the mattress upon which the crib is sitting or to the bed frame upon which the mattress rests,
 - c. checking to make sure that the means for tie down is secure and the crib will not tip over.